## **CLAIMS**

## What is Claimed is:

1. A controller comprising:

a rotatable platter journaled for rotation, said rotatable platter having at least one degree of freedom of movement in addition to rotation;

an optical system responsive to said rotatable platter; and said optical system including an output responsive to said rotatable platter.

- 2. The controller of Claim 1 wherein said rotatable platter includes a textured pattern whereby said optical system acquires sequential surface images of said textured pattern.
- 3. The controller of Claim 2 wherein said optical system is responsive to rotational movement of said rotatable platter.
- 4. The controller of Claim 2 wherein said optical system is responsive to rotational velocity of said rotatable platter.
- 5. The controller of Claim 2 wherein said optical system is responsive to rotational position of said rotatable platter.

- 6. The controller of Claim 1 wherein said at least one degree of freedom of movement comprises one degree of freedom of movement.
- 7. The controller of Claim 6 wherein said one degree of freedom comprises tilting of said rotatable platter.
- 8. The controller of Claim 7 wherein said optical system is responsive to tilting movement of said rotatable platter.
- 9. The controller of Claim 7 wherein said optical system is responsive to tilting velocity of said rotatable platter.
- 10. The controller of Claim 7 wherein said optical system is responsive to tilting position of said rotatable platter.
- 11. The controller of Claim 1 wherein said at least one degree of freedom of movement comprises two degrees of freedom of movement.
- 12. The controller of Claim 11 wherein said two degrees of freedom comprise tilting of said rotatable platter in directions orthogonal to each other.

- 13. The controller of Claim 12 wherein said optical system is responsive to tilting movement of said rotatable platter.
- 14. The controller of Claim 12 wherein said optical system is responsive to tilting velocity of said rotatable platter.
- 15. The controller of Claim 12 wherein said optical system is responsive to tilting position of said rotatable platter.
- 16. The controller of Claim 1 wherein said rotatable platter includes a circumferential skirt with a textured pattern whereby said optical system acquires sequential surface images of said textured pattern.